RTTY

NEWS OF AMATEUR RTTY

MARCH, 1962
30 Cents
Vol. 10, No. 3

WØNFA

HORSE TRADES

This page of the Bulletin is for use of amateurs who have RTTY EQUIPMENT FOR SALE OR TRADE and those looking for equipment to buy or trade. It is a free service and may be the means of getting someone on the air.

FOR SALE: Model 14 transmitter/Distributors, sync motors, Want 14 typing or non-typing reperf. K5QBA, 10765 Wyatt Circle, Dallas 18, Texas.

FOR SALE: TG-26B (14 TD and 14 typing reperf) $175.00, W6PTN, Chula Vista, Calif.

SWAP: Tri-ex 54' crank-up, crank-over tower, for model 15 or 26 printer, W7NSU, 1011 Hobson St., Walla Walla, Wash.

FOR SALE: WE255 sockets for polar relays VE7YC, 1028 Shell Road, EAST, Richmond, B. C.

FOR SALE: CV-31/TRA-7 Dual diversity Converters, 440-510Kc IF, IFs aligned to 455 or special freqs. Outputs, polar/neutral and tone $75.00. FRA converted to 455Kcs, $25.00. W1JBC, 281 Cross St. Winchester, Mass.

FOR SALE: AN/FGC Terminal Units, complete with spare etc. $135.00 W8NLT, 209—55th Street, S. E. Charleston 4, W. Va.

FOR SALE: TT-26/FG TD's, 60 WPM dual heads, 60 cycle sync motors. $115.00 K6JWQ 2650 Durant Street, Berkeley 4, Calif.

SWAP: February 1959 RTTY for June 1960 RTTY. Also need Jan., Mar., Apr., May, June, Oct., and Dec. 1960 RTTYs. Also Jan., Mar., July and Aug., 1961. Have Bolex H-16-16 mm movie camera complete with 13 lens, 13mm wide angle, 25mm std (Switar 1.5f) and 75mm Telephoto (Yvar 2.5f), Case. Interested in TTY Gear, prefer 28 with tape. W2RMB, P. O. Box 328, Norwich, N. Y.

RTTY, Inc.
372 WEST WARREN WAY
Arcadia, California
Return Postage Guaranteed

PASADENA CALIF. MAR 15 5 30 AM 1962

COMMENTS ON THE WORLD WIDE RTTY SS

It was a really unexpected thrill to see the final scores on the World Wide RTTY Sweepstakes! I've been on the air since 1922 and am ever grateful for the many exciting memories, but this tops them all, and it almost seems like a "believe it or not" deal! I'd only been on RTTY for about five or six months, and hadn't really been very active due to long hours of work. Incidentally, the "Butter and Egg tycoon" description is a new one. I tell everyone that I am a "chicken picker" by trade, although my xyl, KOBJK says that "poultry plucker" sounds more dignified.

Really, I had no right to win the contest, other than by luck. In the first place my 75A4 picked that weekend to go completely dead on 40 meters—and I am sure that I could have had 50 more contacts if I could have used 40. Then, I had taken down my 15 meter beam in preparation for putting up a 40 meter beam and had only a multiband vertical, which is for 10-15-20-40 and 80. It follows my old description of a vertical in that it is equally poor in all directions, and in this case it was equally poor on all bands, especially 15, where it was needed. I wasted two hours calling dx that was coming in fb on 15 on the vertical, and couldn't raise a station! This I still don't understand, since they were coming in S8-9. On one occasion I switched to my 40-80 trap dipole to see if the 15 meter signals were better or worse than on the vertical and they were just about the same. By mistake I left the 40-80 trap dipole switched in and went back to calling the boys on 15—and I got them, one after another-the very ones I couldn't raise on the vertical!! Of course I blew out the traps on the dipole, but it was worth it!

What a thrill to hear a station call me after a signoff, and have him sign KZ1BS!! All in all, I still believe it was beginner's luck—so I am going to go all out in the SS and see what happens!

I certainly hope that there is some kind of certificate, or letter, or something, that will show that it was the first such contest. I want to frame it, with the six cards for WAC, and incidentally they are your winners from the other five continents! Search as I did, I could find no mention that there is to be a certificate—so I am hoping.

Just for the record, the equipment here is as follows:

Collins KWI—the old reliable.
Collins 75A
Electro Com FS50 Converter.
Model 28ASR
Six element Telrex 20 meter beam. (This didn't hurt me none!)
Hy-Gain 5 band vertical.
Mosley 40-80 trap dipole-(my 15 meter antenna!)
An XYL, Charlene, (KØBJK) who "fed and watered me".

So, again, I'm proud, happy, and lucky to have won the contest—and I'm nuts enough to really go to work now for the next one!

Thanks also for printing the info on the model 15 available for export, and I hope to hear from someone where we can get it started. We really should pick up a converter etc. to go with it.

If this letter should have gone to W6TPJ, will you please pass it along to him.

Very 73—and I'll be seeing you on the air, Bud.

Sincerely,

Chester B. Franz
WØNFA

No 1, Finlay Road,
Kirkwood 22, Mo.

RTTY
SIMPLE CONVERSION OF THE KWM-2

by K2YEL and K3GIF

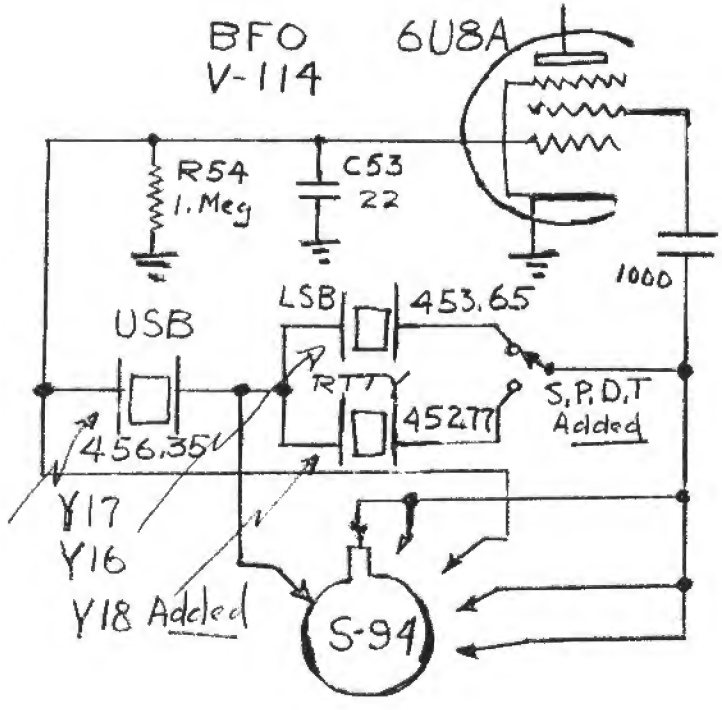
With many of the RTTYers having this type of transmitter, means of operating RTTY with it were undertaken. Several stations have been worked from many stations, who were using the Collins KWM-2s. A few letters brought in circuits but not too much in way of description.

The method employed here is to use an Audio Oscillator, frequency shifted between MARK and SPACE, into the mike input. To quote from the letter, "transmission is accomplished by using a AFSK oscillator into the phone patch input on the KWM-2. CW is provided by interrupting the MARK signal by means of a relay."

Tranmsission and Reception is on the same frequency. Lower sideband is used to provide the STANDARD MARK HIGH arrangement without using back contact keyed relays.

Basically all that is required is a new crystal to be switched in, in place of the Y17 crystal. Its frequency should be between 452.1 kcs and 452.77 kcs. The new crystal is mounted by "taping" it to the present Y-16. A small S.P.D.T. switch, (Microswitch Corp 6AT2) is mounted on the aluminum angle behind the "S" meter.

Details are shown on the Modified for RTTY Circuit. Original is also shown for comparison. Thanks to both K2YEL and K3GIF for their help with this circuit information. —Ed—

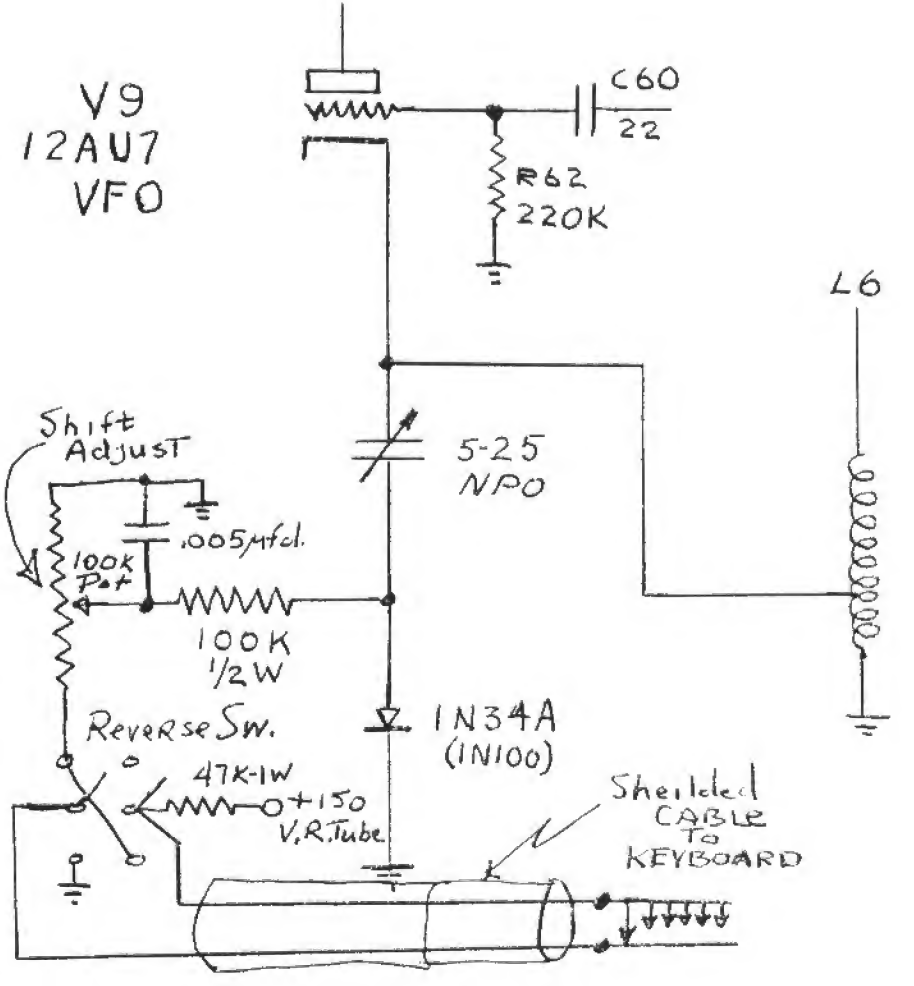


RTTY
FSKing the GONSET GSB-100

Source: Gonset Division of Young Spring & Wire Corp.
Sent in by W5BRQ.

No details were furnished with this circuit, but it follows the same general arrangements used by many. Such as W6NRM's version in the February 1961 RTTY, used in the MARK III TU. The basic idea is the keying in and out of the 5-25 NPO capacitor, by means of the 1 N 100 diode. Provision to reverse the direction of shift is made by the DPDT switch. Width of shift is adjusted by the 100K pot. Note that the leads to the keyboard should be sheilded to avoid RF pick up and introduction of hum etc.

The 5-25 mmfd capacitor should be set for just enough shift on the eighty meter band, since shift width will be reduced as you go the forty, twenty and so on.

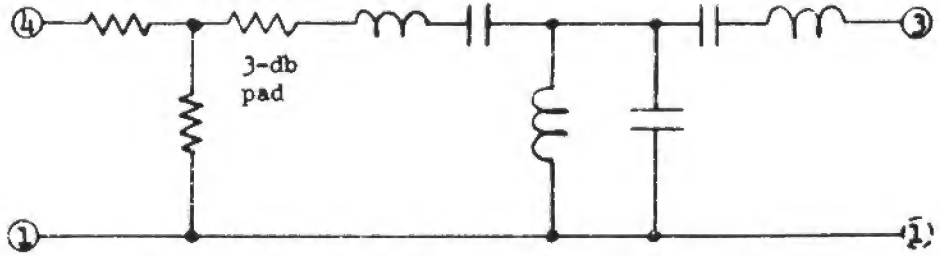


RTTY
FILTERS FOR AMATEUR TU's

Grant E. Storey, W6NTK
P. O. Box 426
Oakhurst, California

For some time, many amateurs have asked for sources of good filters or source of toroids. For some Jack Pitts, W6QK took care of requests for such items. But with his QSYing to YV5 land, we are fortunate in having Grant Storey W6NTK take over with same excellent filters and tuned toroids. Shown below are the various filters he offers, For those who do not have a good Audio Oscillator and a Vacuum tube voltmeter, here is a good place to get those filters.

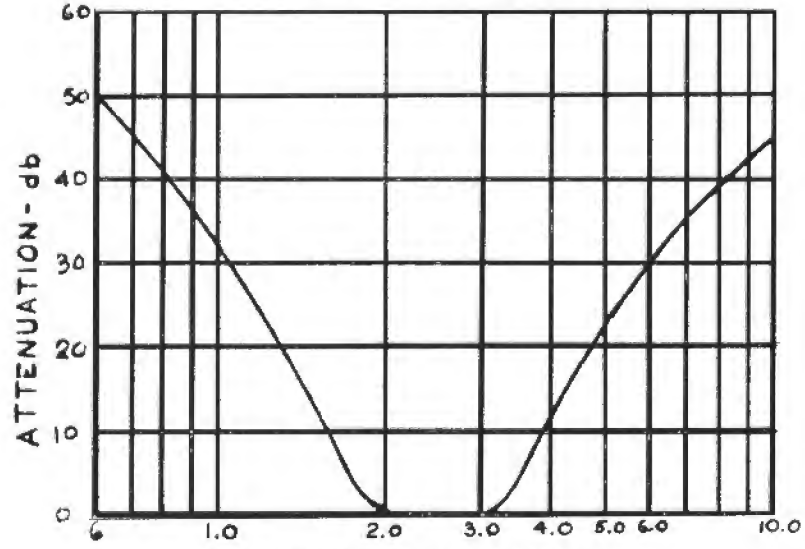
—Ed—



Input Terminals: 1 - 4
Input Impedance: 600 Ohms
Output Terminals: 1 - 3
Output Impedance: 600 Ohms

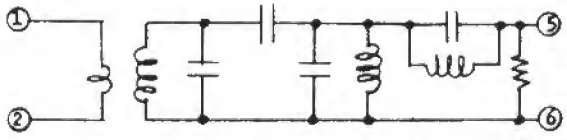
Total insertion loss = 4 db

Typical Characteristics - Type 101A Filter



DATA SHEET TYPE 101A FILTER

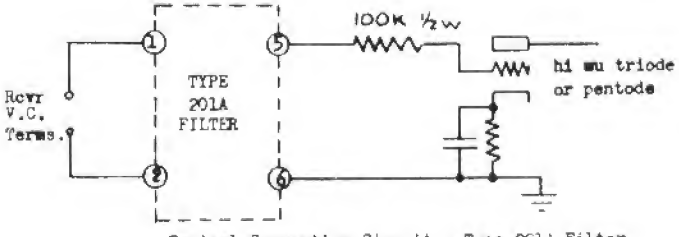
DATA SHEET TYPE 201A FILTER



Internal Connections - Type 201A Filter

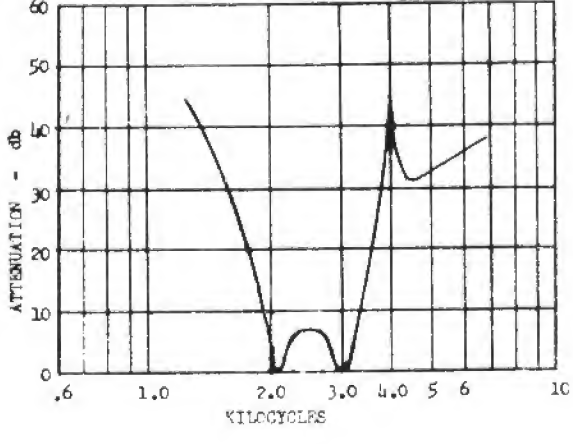
Input Terminals: 1 - 2
Input Impedance: 4 ohms (approx)

Output Terminals: 5 - 6
Output Impedance: 10,000 ohms (self-terminated)

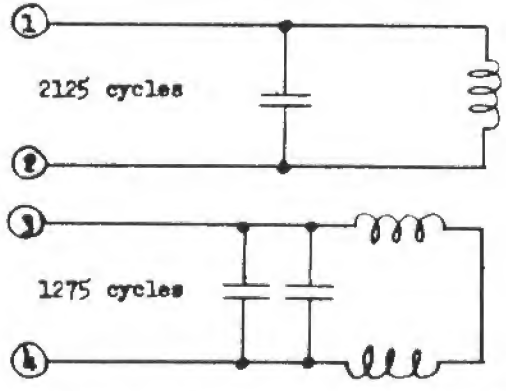


Typical Connecting Circuit - Type 201A Filter

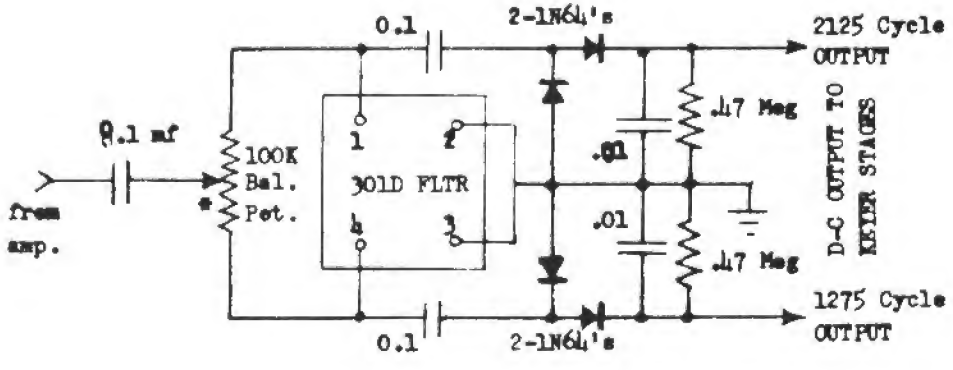
Typical Characteristics - Type 201A Filter



Internal connections Type 301D Filters

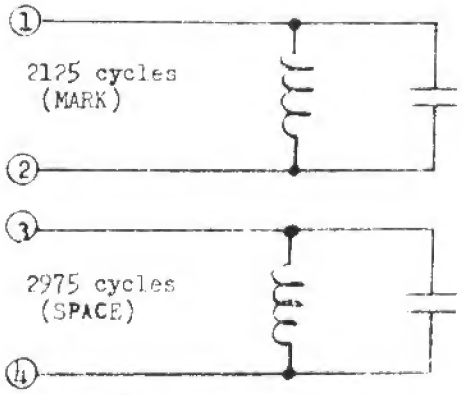


Internal connections - Type 301D Filter

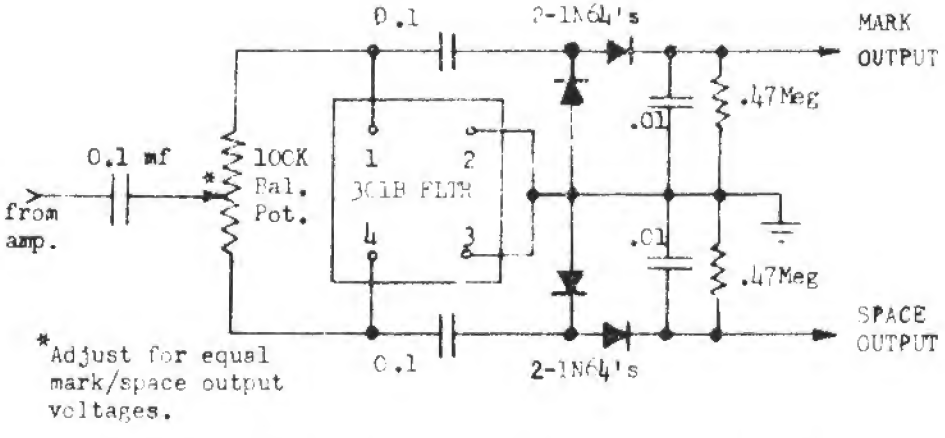


Typical Connecting Circuit. For further information, see the RTTY column in CQ magazine for March and April, 1961

DATA SHEET TYPE 301A FILTER

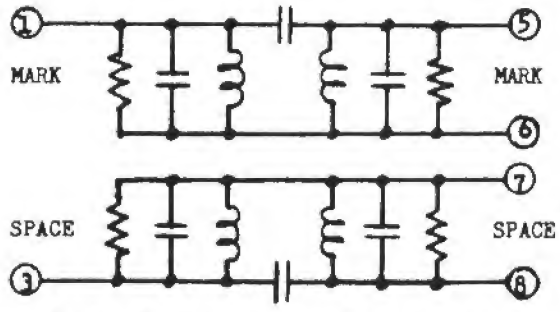


Internal Connections - Type 301B Filter

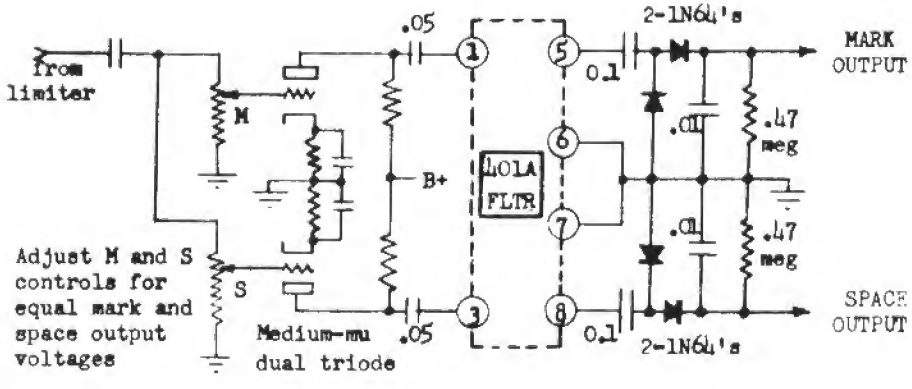


Typical Connecting Circuit. For further information, see the RTTY column in CQ magazine for March and April, 1961.

DATA SHEET TYPE 401A FILTER

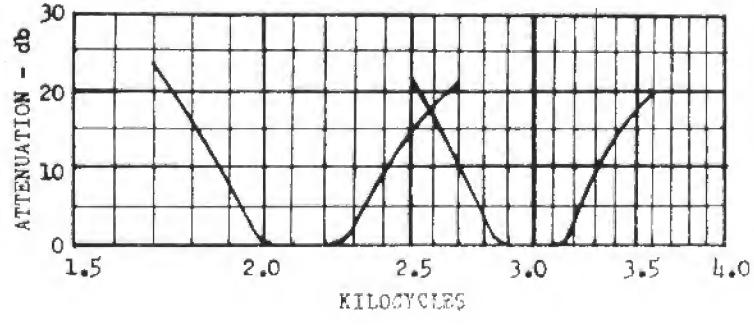


Internal Connections - Type 401A Filter



Typical Connecting Circuit - Type 401A Filter

Typical Characteristics - Type 401A Filter



KZ5KR with KZ5GA and KZ5DS

LA6J

W6CQX - W6NTK FILTERS
Box 426
OAKHURST, CALIFORNIA.

RTTY FILTERS

FILTER TYPE NUMBER	PASS-BAND (Cycles)	IMPEDANCE IN	IMPEDANCE OUT	DESCRIPTION	PRICE POST-PAID
101A	2000 to 3000	600 ohms	600 ohms	"T" Section 3-Toroid Filter with 3 db Resistor Pad in Input Circuit. See CQ RTTY Column for April 1961.	$6.95
101B	1100 to 2300	600 ohms	600 ohms	Similar to 101A but for Collins "S" Line.	$8.25
201A	2000 to 3000	4 ohms	10,000 ohms self-term.	3-Toroid Top-Coupled Filter. Connects between Receiver Voice-Coil Terminals & Grid of Limiter Tube in TU.	$7.95
301A	2125 or 2975 Single Freq.	High-Impedance Plate to Diode		Individual Plug-In Filters. Similar to Filters described in CQ RTTY Column for March 1961. For Twin City TU	$3.50 each
301B	2125 & 2975 Single Freq.	High-Impedance Plate to Diode		Same as 301A except both Mark & Space Filters are mounted in one Can.	$6.95
301C				Similar to 301B except for 170 cycle Shift. Specify desired frequencies.	$6.95
301D	1275 & 2125 Single Freq.	High-Impedance Plate to Diode		Similar to 301B but for Collins "S" Line.	$7.95
401A	2125 & 2975 Band-Pass	High Impedance Plate to Grid or Diode		200 Cycle Pass Band centered about Mark & Space Frequencies. Permits less Critical Receiver Tuning.	$9.95
501A	2125 & 2975			AFSK Oscillator Toroid Coil & Capacitors Plugs into Octal Socket.	$3.95

Each Filter (except 301A & 501A) is encased in 2¼" X 2¼" X 4" Aluminum Box with Octal Plug on one end. Full information is included with each Filter, with typical Connecting Circuit. All Filters are covered by a Money-Back Guarantee.

Toroids Precision-Tuned to Specified Frequencies for $2.00 each or 5 for $9.00, Including Capacitors.

88 MHY Toroids: Uncased & Like new -- $1.00 each or 5 for $4.00 Post-paid.

Proposed RTTY Connection Standards

Various forms of patching networks have been detailed throughout the history of amateur radioteletype operation. Which one to use has mostly been determined by the individual amateur's specific needs.

At conventions and ham RTTY meets there are often several TU's on display and various patch panels which range from the simple to the complex. A continuously repeated difficulty is that home-brew equipment (no matter how refined the construction is) is seldom interchangeable – with the result that special patch cords have to be fabricated on the spot to hook one fellow's machine to the next guy's patch setup and then perhaps even to a third ham's TU. Such equipment hook-ups are usually fascinating and of interest for comparison of filter action and operation under adverse receiving conditions, etc.

All machines in any one station have to first be connected to a common panel before they can be "patched". Here may be the answer –. Why not voluntarily adopt a "Ham Standard" for plugs and receptacles on all of our RTTY equipment? You can see that if this were accomplished, then fellows from any part of the country could interchange station apparatus at conventions, etc., with a minimum of bother.

Several of the local hams have considered using a standard octal plug and socket which are available at all radio supply houses if not by the dozen in most junk boxes. A typical set of connections would be as follows:

Pin	*Function*
1,2	Remote motor control or "autostart".
3,4	Keyboard
5,6	Printer magnet
7,8	Spares for special functions, or common ground connection

In essence then, the TU output and all machine connections to the TU or patch network would be through octal plugs An octal plug or receptacle would be on each machine Interconnections would be made with cables having some combination of plugs, receptacles, or a plug and receptacle.

The idea of octal socket connectors may not be the best, however, it is a readily available and inexpensive means of standardizing. Any other suggestions would also be welcome.

I would sincerely appreciate any comments you may have in regard to this proposal.

73
W8DTY

A copy of the NEW RTTY HANDBOOK (CQ $3.95) has been received and read. It is well written and is a quite different style than the former RTTY Handbook which was published several years ago.

For both the newcomer as well as the older operator, this one should be in your library. Information on the more popular printers, as well as the wiring diagrams are well worth having on file. Additional information on the various piece of Tape gear is given. Both types of TU's are discussed with examples of each given. Several types of AFSK and FSK keyers are shown. Details on setting up RTTY stations are included. There is a chapter on accessories and also a list of several Technical Manuals.

Merrill Swan, W6AEE, editor of RTTY has resigned as Manager of Quality Control, Cannon Electric to rejoin the research staff of the United Geophysical Company in Pasadena.

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For "RTTY" Information:
W6DEO W6CG W6TPJ W6AEE

CARTER O'BRIEN, W6YJG
1123 PINE STREET, SANTA MONICA, CALIFORNIA

DX - RTTY

Bud Schultz, W6CG
5226 N. Willmonte Ave.,
Temple City, Calif.

Hi Gang:

This department is confronted by the problem of having more choice DX morsels than the space will allow so we'll just have to touch the high spots. A million thanks to all of you who sent in the big stack of cards and letters in the past few weeks! Let's start with the latest scoop from Europe via K3GIF and G3CQE who combined their talents to send in a list of news that would make a DX column by itself! They report that VERON, the Dutch Amatur Radio Society have supplemented their regular code practice and CW news broadcasts from Station PAOAA with RTTY on Sundays at 1130 GMT on 3625 Kcs and use a power of 250 watts. Several East Coasters have reported copying these transmissions. More good news from another new country; Belgian amateurs have received approval for RTTY operation and the following are expected on the air shortly; ON-4HW, ON4UM, ON4WI, ON4VI, ON4HJ. Bill also added about six new G stations to the already imposing list of active English hams on the RTTY circuit. Bruno, I1RIF is awaiting a new Rhode and Scharwtz T.U. that should allow him to print weaker sigs (like those from the West Coast- I hope!). DL6EQ and DL3WUA are still showing up on the DX logs of a number of the gang. Same can be said for LA6J. Jim Miller, W9NTV, whose current call is DJOBX writes that he is trying to get an RTTY set-up underway from Munich. Jim says that he has a Model 15, Model 14 Reperf and TD and a W2JAV converter. He wants the DX'ers to turn their beams his way between 1600 and 1800 GMT and listen for him around 14,100 to 14,125Kcs. Bob, G3-GNR, had his compact smashed up in an accident but luckily he wasn't hurt. However, he's still living dangerously — He's planning on getting married in September!!

Henry, ZS1FD, lost the reflector from his beam during a storm but it certainly doesn't appear to have much effect on his signals in the States. He still pours in here on the Coast whenever the band is open to Africa. He told K3GIF that he stays up quite late — perhaps until 2300 GMT and has been hearing KL7 and the West Coast of the USA with fine copy on 14 Mcs. Ron, ZS1NE, has modified his gear to allow printing from both mark and space instead of his old single channel arrangement and should do much better now. He sold his Kleinschmidt to ZS6CP who plans to get it on the air soon.

Dale, KZ5DS, reports he recently sent some transistors to both Monte, HC1JU, and Zip, OA4BR, so they can complete their AFSK oscillators for use on their SSB exciters. Both should be on the air before the end of the month. Dale is being sent back Stateside — either to the Baltimore area or to Palo Alto. His activity in the Canal Zone will be missed. As usual —Bob Engel, TG9AD, — is just about the most active typer on any of the bands. He tells us that he has been having exceptional luck on 3.5 Mcs since the HF bands have been suffering from sun spot trouble. Bob and his XYL are planning a trip to the States in the next few months and is looking forward to meeting many of the RTTY group. Still no word of operations from Joe, YV5-AFA, but rumor has it that he is now completely equipped for FSK and should be dishing out South American contacts by the time this gets into print.

Due to erratic conditions, the Pacific Area has been very quiet for the past six weeks. Phil Littin, VR2CV, of the Fiji Broadcasting Commission Suva, is working with G3-CQE at a Braodcast station in England. He told Bill that VR2AC had a teleprinter on the Island and has recently left Fiji. Phil thinks the machine was left with another ham there and says he will check when he returns to Suva in about a month and try to get the gear on the air. This is good news to those who missed VR2AC when he was on RTTY from Fiji. Eric, VK3KF, writes that he had to remove his 15 meter antenna because it was on a neighbors property and at this time his operation is restricted to twenty and forty meters. Eric says he had a couple of contacts on forty with VE7KX and has been working the East Coast about 0600 GMT on 14msc on Saturday nights. Eric reports that Alec, ZL3HJ, has his new rig completed and is now quite active. He says Alec has a fine T-9 signal that prints beautifully. Bruce, ZL1WB, writes that he had a couple of good contacts with Mike, G3JFF/MM and suggests that at the present time Mike is located somewhere in the New Hebrides Group. Keep your receivers on 21,090 for G3JFF/MM. He's rockbound on that frequency. Bruce is again having problems with the PTO on his 75A-- and is threatening to do something "desperate" about it this time. ZL1WB is building a 20 meter Yagi — all steel job— electric welded— all zinc sprayed for anti— corrosion to protect it from the salt laden air of the Northland.

Many of the "older" DX'ers will be glad to hear that a long letter was received from Cas, Ex-KR6AK, and the old boy is still very much interested in RTTY and promises to return to the active list as soon as Uncle Sam lets him stay in one spot long enough to get things organized. He suggests that this "one spot" may very well be Viet Nam. What a sensation ole Cas would be if he opened from a spot like that!! For those of you not acquainted with him— Cas was one of the founders of the RTTY-DX movement and did a great deal to get the far-off places active on FSK. His present hobby is parachute jumping and jungle warfare training!! He still gives his occupation as "Hired Killer"!! Please get back on those green keys, Cas, we need ya real badly.

WAC-RTTY Award nr 21 goes to Howard Hale, W6FYM. Congrats, Howard, Your certificate is on its way to you. Kent Merkel, WOPHM/4 asks that those of you who want QSL cards address him at 7794 Commodore, Millington, Tenn. This applies, of course, to any of you who still need cards from him when he was operating as WOPHM/VOL.

The news basket is still full of goodies but I'm running out of paper so the rest will have to wait. Keep your powder dry and I'll see you next month. 73

Bud Schultz, W6CC

WANTED: TT-4/A or TT-76/A Klienschmidt printers. W9UE.
FOR SALE: AN/FRR and AN/FGC diversity receivers and TUs. W6AFX
WANTED: Model 15 for 50 cycles, 220 Volts AC in good operating condx for VS1JD. Prefer in California area. Lee. 1246 Manhattan Beach, Blvd., Manhattan Beach, California.
FOR SALE: Teletype gear, surplus Model 15 printers, reperfs, TDs, Sync Motors, Parts. Free Flyer. MDC Industries, Dept. 2, 923 West Schiller Street, Phila. 40, Pa.
WANTED: FRXD reperforator-transmiter; XRT-34: Metal table for 19 or 15. W4NZY
FOR SALE: 11/16" yellow oiled perf tape, roll 25¢, 10 rolls for $2.00 plus postage. W4NZY, 119 North Birchwood Ave., Louisville 6, Ky.
FOR SALE: Model 28 console type. Would trade for 16 mm movie camera. WØIQC, 12301 OR TRADE East 47th Terrace, Independence, Mo.
WANTED: July, Sept., Oct. and Nov. 1956 RTTYs' W4ZPZ, 1518 Oriole Place, Greensboro, N. C.
WANTED: High base and Cover for typing reperf, model 14. Cash or swap model 14 or 15 keyboard. Steve Basser, 344 South Franck Ave., Louisville 6, Ky.
FOR SALE: Model RA-87 Power suply $9.00. WE DC regenerative repeater model X-6603-A $65.00 W5LCU, P. O. Box 174, Harlingen, Texas.
WANTED: Model 28 keyboard, also cover for 28 KSR. State condx and price K2MKQ 257 Washington Drive, Pennsville, N. J.
FOR SALE: Teletype ribbons (type used by WU) 10¢ each. 12/$1.00. Include 3¢ each postage. Also description and 4 large foldout circuits of WU electronic regenerative repeater @ 50¢ W2BVE, 834 Palmer Avenue, Maywood, N. J.